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## What Is Claimed Is:

- 1 1. A location system, comprising:
- 2 an area agent, comprising a presence application;
- 3 a presence server, collecting location awareness
- 4 information supporting the presence application; and
- 5 a local area server, returning location information in
- 6 response to a request from the area agent;
- 7 wherein the area agent generates the location awareness
- 8 information according to the location information
- 9 obtained from the local area server.
- 1 2. The location awareness system according to claim 1,
- 2 wherein the request sent from the area agent comprises an area
- 3 tag, according to which, the local area server seeks the location
- 4 information.
- The location awareness system according to claim 1,
- 2 wherein the area agent directly submits the location awareness
- 3 information to the presence server.
- 1 4. The location awareness system according to claim 1,
- 2 further comprises a relay forwarding and managing information
- 3 exchange between the area agent and the local area server.
- 1 5. The location awareness system according to claim 4,
- 2 wherein the relay downloads location information from the local
- 3 area server for periodic update.
- 1 6. The location awareness system according to claim 4,
- 2. wherein the relay retrieves the location awareness information
- 3 from the area agent for submission to the local area server,

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4 which then transfers the location awareness information to the

- 5 presence server.
- 1 7. The location awareness system according to claim 1,
- 2 further comprises an authentication server assigning an
- 3 authentication code to the area agent.
- The location awareness system according to claim 7,
- 2 wherein the request sent from the area agent comprises the
- 3 authentication code, and the local area server returns location
- 4 information according to the authentication code.
- 1 9. The location awareness system according to claim 7,
- 2 wherein the authentication server further comprises a relay for
- 3 forwarding and managing information exchange between the area
- 4 agent and the local area server.
- 1 10. The location awareness system according to claim 9,
- 2 wherein the relay collects the location awareness information
- 3 from the area agent for submission to the local area server,
- 4 which then publishes the location awareness information to the
- 5 presence server.
- 1 11. A location awareness method for operating a presence
- 2 application in an area agent, comprising the steps of:
- 3 acquiring an area tag;
- 4 requesting location information from a local area server
- 5 by sending the area tag;
- 6 obtaining the location information from the local area
- 7 server;
- 8 generating location awareness information accordingly;
- 9 and

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10 submitting the location awareness information.

- 1 12. The location awareness method according to claim 11,
- 2 wherein the location awareness information is directly
- 3 submitted to a presence server.
- 1 13. The location awareness method according to claim 11,
- 2 wherein the location awareness information is submitted to a
- 3 relay for transmission to the local area server.
- 1 14. The location awareness method according to claim 11,
- 2 wherein the location awareness information is submitted to the
- 3 local area server.
- 1 15. The location awareness method according to claim 11,
- 2 further comprises acquiring an authentication code from a
- 3 authentication server and sending the authentication code
- 4 together with the area tag to the local area server to obtain
- 5 the location information.